

CLAIM AMENDMENTS

Claim 1 (presently amended):

A cutting machine comprising:

a blade configured to cut a workpiece;

a detection system configured to detect a dangerous condition between a person and the blade;

a reaction system adapted to perform a specified action to mitigate possible injury from the dangerous condition; and

a fusible member adapted to fuse to trigger the reaction system to perform the specified action upon detection of the dangerous condition.

Claim 2 (original):

A cutting machine comprising:

a support structure;

a cutting tool adapted to cut a workpiece, where the cutting tool is supported by the support structure;

a detection system adapted to detect a dangerous condition between the cutting tool and a person;

a reaction system adapted to perform a specified action upon detection of the dangerous condition;

a fusible member to trigger the reaction system to perform the specified action upon fusing of the fusible member; and

a firing subsystem to fuse the fusible member upon detection of the dangerous condition.

Claim 3 (original):

The machine of claim 2, where the dangerous condition is contact between the person and the blade.

Claim 4 (previously presented):

The machine of claim 2, where the reaction system is a brake mechanism and where the specified action is to decelerate the blade.

Claim 5 (original):

The machine of claim 2, where the fusible member is wire.

Claim 6 (withdrawn):

The machine of claim 5, where the wire has a diameter of less than 0.025 inch.

Claim 7 (withdrawn):

The machine of claim 5, where the wire has a diameter of less than 0.015 inch.

Claim 8 (original):

The machine of claim 2, where the fusible member is held in tension.

Claim 9 (original):

The machine of claim 2, where the firing subsystem includes at least two spaced-apart electrodes adapted to conduct electrical current, and where at least a portion of the fusible member is positioned to contact and extend between the electrodes.

Claim 10 (previously presented):

The machine of claim 9, where the spacing between the electrodes is less than 1.0 inch (25.4 millimeters).

Claim 11 (previously presented):

The machine of claim 9, where the spacing between the electrodes is less than 0.1 inch (2.54 millimeters).

Claim 12 (previously presented):

The machine of claim 9, where the spacing between the electrodes is less than 0.05 inch (1.27 millimeters).

Claim 13 (original):

The machine of claim 9, where the electrodes are traces on a circuit board.

Claim 14 (original):

The machine of claim 2, where the firing subsystem includes at least one capacitor.

Claim 15 (original):

The machine of claim 2, where the firing subsystem includes at least one silicon controlled rectifier.

Claim 16-20 (cancelled).

Claim 21 (original):

A cutting machine comprising:

a cutting tool;

a detection system adapted to detect contact between a person and the cutting tool; and

a brake system including a brake pawl adapted to engage and stop the cutting tool when the detection system detects contact between the person and the cutter;

where the brake system includes a release mechanism adapted to selectively restrain the brake pawl from engaging the cutter until the detection system detects contact between the person and the cutter; and

where the release mechanism includes a fuse wire that is melted upon detection of contact between the person and the cutter.

Claims 22-24 (cancelled).

Claim 25 (original):

A cutting machine comprising:

a cutter;

a brake adapted to stop the cutter, where the brake has an idle position and a braking position; and

an actuation system adapted to selectively move the brake from the idle position to the braking position, where at least a portion of the actuation system must be replaced after moving the brake from the idle position to the braking position.

Claim 26 (original):

The machine of claim 25, wherein the actuation system includes a fusible member that is melted to allow the brake to move from the idle position to the braking position.

Claim 27-33 (cancelled).**Claim 34 (original):**

A cutting machine comprising:

a support structure;

cutting means for cutting a workpiece, where the cutting means is supported by the support structure;

detection means for detecting a dangerous condition between the cutting means and a person;

reaction means for performing a specified action upon detection of the dangerous condition;

fusible means for triggering the reaction means to perform the specified action upon fusing of the fusible means; and

firing means for fusing the fusible member upon detection of the dangerous condition.